IN THE SPECIFICATION

With respect to the above identified Office Action, please amend the specification of the application as follows:

Page 31, in lines 2, 9, 14, replace “500” with “501”,

Page 32, line 25, replace “975” with “960”,

Page 35, line 16 and 17, replace ‘202” with “552B” and replace “204” with “552A”,

Page 35, line 24, replace ”502B” to “502A”,

Page 47, line 19, replace “109” with “572”,

Page 49, line 15 replace “150” with “950” and replace “160” with “960”,

Page 51, line13, replace “904” with “906”,

Note that the informality listed by the Examiner on page 35, line 23, regarding replacing “inner” with “outer” has not been made since the numbering of respective element on line 24, has been revised as discussed above. Further, the listed informality on page 40, line 4 has not been revised by the Applicant for the reason that the Applicant believes the existing text is correct.

Revised paragraphs containing the corrected text are set forth below. Marked up paragraphs, showing each change in text, are attached separately to this Response.

Page 31. Beginning at Line 1:

B1 Cont

“Figure 4B is another embodiment of a single axis magnetic saturation generator **501** but having two cores **551** and south poles **504**. The two north poles **505** are combined into a magnetic culminator **555**. It will be appreciated by persons skilled in the technology that the culminator must be of sufficient magnetic permeability and mass in order that it not be saturated by the saturation flux or by a combination of the saturation flux and transmitter

flux.

B1 Con'd

Figure 4C is a two-axial magnetic saturation generator device **501** utilizing a magnetic culminator **555**. The two-axial cross-flux magnetic saturation generator is adjacent to the well casing **110**. The four like poles **504** are connected to four separate cores **551**. The opposing magnetic poles are contained within the mass of the magnetic culminator **555**. Figure 4D is a three-axis magnetic saturation generator device **501** also incorporating a magnetic culminator. The three-axis device is adjacent to the well casing **110**."

Page 32, beginning at line 21:

B2

"Figure 6A, 6B and 6C show the geometry of the saturation flux **140** engaging the casing **110**. Figure 6C illustrates a configuration with the transmitter **300**, wound around the magnetic culminator **555**, is more centrally located in relation to the magnetic flux lines engaging or penetrating the greatest distance into the depth **960** of the casing **110**. In Figure 6B, two opposing South poles are brought together or in close proximity between two North poles. The magnetic flux field lines emitted from the opposing South poles push the flux field out into the well casing **110**. However a large unsaturated volume region remains."

Page 35, beginning at line 13:

B3 Con't

"Figure 10 illustrates another embodiment of logging tool **500** used in conjunction with a single magnetic saturation generator to create the necessary Metallic Transparency region to practice the present invention. The logging tool **500** comprises an outer cylindrical portion **552B** and an inner cylindrical portion **552A**. The transmitter, receiver and saturation coils are disposed on, in or around the outer cylindrical

portion **552B** and the inner cylindrical portion **552A**.

Figure 10A illustrates an embodiment of a logging tool **500** used to generate a transparency with respect to a material **110** for practicing the present invention as could be adapted in Figure 10. A transmitter coil **300** is disposed at the remote end of the outside diameter of the inner cylindrical portion **552A** of the saturation core. A saturation coil **551** is disposed at the inner end of the outside diameter of the inner cylindrical portion **552A** of the saturation core. A receiver coil **580** is disposed within the inside diameter of the inner cylindrical portion **552A** of the core. The receiver coil **580** can be located at different positions using a shaft **232** which telescopes within the inside diameter of the inner cylindrical portion **552A** of the saturation core. The telescoping shaft **232** can also rotate using a setscrew adjustment **206** and a setscrew housing **208**. Also, wiring **234** can be channeled through the shaft **232**."

B3 Cont'd ✓

Page 41, beginning at line 20:

"Figure 16 shows two Transmitters, **300A** and **300B**, wound on separate Saturation Cores **552A** and **552B** respectively, with bucked Transparency magnets **551A** and **551B**. The Transmitters are both wound with their coils substantially parallel to the Casing **110**. The respective induced eddy currents **610** and **611** are also bucked. To deflect the Transmitting Current **150** and **151** from **300A** to the top, Transmitter **300B** should be increased in strength at the same frequency and Transparency Current of **500B** must be increase over Transparency Current of **500A**.

B4 ✓ Cont'd

In Figure 17, another Transparency magnet **500C** is added to increase the current to the distance D_{23} **910**. This increase in current will reduce the permeability of the adjacent core wall. This will bend

B4 Cont'd

the flux field **140-143** downward while Transmitter **300A** is made much more powerful than Transmitter **300B** to push the flux field down. It will be appreciated that increasing the power of the oscillating flux created by the Transmitter **300A** will result in an increase in the induced eddy current **610** in contrast to the induced eddy current **620** of Transmitter **300B**."

Page 42, beginning at line 1

B5

"In Figure 18, anther embodiment of the invention relating to beam movement is shown. This embodiment utilizes the Transmitters **300A** and **300B** having equal diameters but oriented at 90 to the other. The oscillating magnetic flux of each transmitter will induce eddy currents **610** and **611** in the electrically conductive casing 110 also oriented 90° to the other. Again, it is possible to use combination of transmitter and Magnetic Transparency Generator's **500A** and **500B** having unequal saturation strengths to bend **956** the flux field **140** and **141**.

Page 47, beginning at line 18:

B6 Cont

"In Figure 22, the bistatic logging tool **500** consists of two separate magnetic saturation generators **593** and **595** contained within a housing **572**. The magnetic saturation generator **593** incorporates a receiver with a receiver coil **581** wound orthogonal to the saturation coil **551**. The magnetic saturation generator **595** incorporates a transmitter **300** with the transmitter coil **301** wound parallel to the saturation coil. The distance between the receiver coil **581** and the transmitter coil **301** is the distance "D" **910**. The logging tool **500** is in operative association with a well casing **110** having a defect **599A**. It can be appreciated by those skilled in the art that in the bistatic configuration illustrated in Figure 22, the distance D must be sufficiently small

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B6 Cont'd

relative to the geometric size of the defect **599A** in order that the logging tool may detect the defect. Accordingly, the accuracy of the casing thickness calculation is limited by the mass to be evaluated and the displacement distance "D" **910**."

Page 49, beginning at line 12:

B7

"FIG 5C illustrates one embodiment of the logging tool **500** of the present invention. The logging tool **500** comprises the saturation coil **551**, the transmitter coil **300**, receiver coil **580** and the well casing **110**. The magnetic saturation generator **501** is disposed from the well casing **110** by a gap G **950**. The well casing **110** has a thickness L **960**. The logging tool **500** operates by energizing the saturation coil **551** for saturating the well casing **110**, transmitting a transmitter flux from the transmitter coil **300**, and receiving a response via the receiver coil **580**. The relative penetration is caused by the change in the saturation flux. Thus, as the saturation flux increases from i_1, to i_2, to i_3, to i_4 then the penetration depth increases from δ_1, to δ_2, to δ_3, to δ_4, respectively. Figure 5C illustrates the incremental increase in penetration by the field lines F_1, F_2, F_3 and F_4. Also, consideration of the cross-sectional area of each component of the logging tool **500** is required to assure that no component goes into total saturation for a specific power requirement necessary to drive the magnetic flux across the gap G **950**."

Page 51, beginning at line 8:

B8 ✓ Cont'd

"Figure 25 is a graph of amplitude versus time for a bistatic configured magnetic saturation generator of the present invention. The frequency is held constant (fixed) and the barrier material, also of constant thickness, and is varied. The bistatic magnetic saturation

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